

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 31-59 are pending in this application.

Objection to the Title:

The title of the invention was objected to as allegedly not being descriptive. By this Amendment, a new title has been provided. This new title is indicative of the invention to which the claims are directed. Applicant therefore requests that the objection to the title be withdrawn.

Objection to the Claims:

Claims 1, 7-10 and 19-22 were objected to because of informalities. These claims have been canceled, thereby rendering the objections to these claims moot.

Rejection under 35 U.S.C. §101:

Claim 27 was rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. In particular, section 6 (page 3) states that "Claim 27 defines a computer program or suite of programs...." Claim 27 has been canceled. None of the new claims presented herein defines "A computer program or suite of programs..." *per se* as previously required by former claim 27. Applicant therefore requests that the rejection under 35 U.S.C. §101 be withdrawn.

Rejection under 35 U.S.C. §102:

Claims 1, 2, 7-9, 11 13, 14, 19-21, 23, 27 and 28 were rejected under 35 U.S.C. §102 as allegedly being anticipated by Cash et al. (U.S. '297, hereinafter "Cash"). Applicant traverses this rejection with respect to new claims 31-59, including new independent claims 31, 42, 43 and 54.

Anticipation under Section 102 of the Patent Act requires that a prior art reference disclose every claim element of the claimed invention. See, e.g., *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1574 (Fed. Cir. 1986). Cash fails to disclose every claim element of the claimed invention. For example, Cash fails to disclose “an image generator arranged to receive said local video images and information relating to said remote video images, and generate combined video images for display on said local video display by combining said local and remote images such that the images of the participants appear to be overlaid one on top of the other in substantial alignment,” as required by new independent claim 31 and its dependents. Similar comments apply to new independent claim 42. Cash fails to disclose “generating combined video images for display by combining the video image of the local participant with the video image of the remote participant such that the images of the participants appear to be overlaid one on top of the other in substantial alignment,” as required by new independent claim 43 and its dependents. Similar comments apply to new independent claim 54.

The invention of claims 31, 42, 43 and 54 thus enables a user, participating in a video conference and having a device with a small display, to see both an image of himself and an image of the other participant on the display. This benefit is achieved by combining the image of the local participant with the image of the remote participant such that the images of the participants appear to be overlaid one on top of the other in substantial alignment – as required by claims 31, 42, 43 and 54.

Cash discloses a video communications system incorporating a multi-window display where two or more windows, each showing an image of a participant of the video conference, can be displayed at the same time on an ordinary computer display. See, e.g., windows 27₁-27₃ and 37₁-37₃ in Fig. 1 of Cash.

The purpose of Cash is to enable this while only using a single decoder. (At the time of the Cash system, a decoder was needed for each video stream so in order to display three different images in three different windows three decoders were needed.) One way to achieve this is to overlay a part of a window with another window, for example window 27₁ over a part of window 27₂ in Fig. 1, and eliminating the macroblock(s) of the part of the image that is overlaid, or hidden, by the other window. The eliminated macroblock(s) does therefore not need to be decoded. Hence, by only decoding visible parts of the images all the received images can be decoded using only one decoder.

As a specific example, col. 8, lines 36 *et seq.* of Cash thus states the following (emphasis added):

The macroblock T/E circuit 410 both eliminates macroblocks of video data that will not be displayed and translates the position of the macroblocks data to match the user's configuration. Macroblock elimination is required because in a windows environment, certain portions of video window may overlap portions of another window. As a result, if a given macroblock is contained within the portion of a window that is hidden from view or occluded, the macroblock T/E circuit 410 eliminates that macroblock data.

Cash thus teaches that a part of an image that is overlaid by another window is discarded and not even decoded. Hence, the teachings of Cash would lead one skilled in the art away from the invention of claims 31, 42, 43 and 54 since Cash explicitly teaches eliminating all the macroblocks of the image of the participant that are overlaid by the image of the other participant. No combination of the images would be possible from the teachings of Cash and only one of the participants (i.e., either the face of the local user himself or the face of the other participant) would be shown on the display.

Accordingly, Applicant respectfully requests that the above noted rejection under 35 U.S.C. §102 over be withdrawn.

Rejections under 35 U.S.C. §103:

Claims 3, 4, 6, 10, 15, 16, 18 and 22 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Cash in view of Oliyide. Claims 5, 17, 25, 26, 29 and 30 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Cash in view of Cohen-Solal. Claims 12 and 24 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Cash in view of Maurer. None of these secondary references (Oliyide, Cohen-Solal and Maurer) resolves the above-described deficiencies with respect to new independent claims 31, 42, 43 and 54. Namely, none of these secondary references resolve the deficiencies of Cash with respect to generating combined video images for display by combining the video image of a local participant with the video image of a remote participant such that the images of the participants appear to be overlaid one on top of the other in substantial alignment.

For example, Cohen-Solal describes a video display device having a picture-in-picture display and a processor. The processor detects cues, such as colour/texture/events/behaviours present in the primary display image that is overlaid by the PIP. These cues are used by the processor to determine important portions of the primary display and in response to such detection change the display characteristics, such as position, size and transparency, of the PIP in order to avoid that the PIP covers the important portions. However, an image of a person shown in the primary image is never combined with an image of a person showed in the PIP such that the persons appear to be overlaid one on top of each other in substantial alignment. On the contrary, the person shown in the primary display would be considered to be an important part of the display image and would therefore not be covered by the PIP.

As another example, Maurer discloses a method and apparatus for sensing a person's facial expressions to generate and animate an avatar image based on facial sensing. However, the combination of Maurer and Cash none fails to disclose generation combined video images for display by combining the video image of the local participant with the video image of the remote participant such that the images of the participants appear to be overlaid one on top of the other in substantial alignment.

Accordingly, Applicant respectfully requests that the above noted rejections under 35 U.S.C. §103 over be withdrawn.

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____



Raymond Y. Mah
Reg. No. 41,426

RYM:dmw
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100